

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DWSRF PRELIMINARY DESIGN SUMMARY

I. General Information

- A. Project Name:**
- B. Description of Present Situation:**
- C. Estimated Project Costs:**
 - 1. Total Cost:
 - 2. Source of Funding:

II. Design Data

- A. Current Population:**
- B. Design Year and population:**
- C. Design Demand:**
 - 1. Domestic:
 - 2. Industrial/Commercial
- D. Peak Demand:**

III. Water Supply

- A. Surface Water**
 - 1. Location:
 - 2. Type:
 - 3. Source volume:

B. Groundwater Well(s): Existing

1. Number:
2. Location:
3. Type and Diameter of Well
4. Capacity:
5. Standby Power:
6. Well House:
7. Aquifer Type:

C. Flow Meters

1. Type:
2. Location:
3. Indication, recording and totalizing:

IV. Treatment

A. Provide Raw Water Analysis

B. Indicate the type of treatment

C. General

1. Number of Pumps:
2. Capacity of Pump:

D. Clarification

1. Rapid Mix Unit

Number:

Size:

Detention time:

2. Flocculation Unit

Number:

Size:

Detention time:

Agitator Speed:

Velocity:

3. Sedimentation Unit

Number:

Size:

Detention:

Baffle Location:

Overflow Rate:

Velocity:

Sludge Removal:

Detention Time:

E. Filtration

1. Type:

2. Number and Size of Units: N/A

3. Filtration rate:
 - a. at peak flow rate:
 - b. at average flow rate:
4. Type, depth, and grain size of filter media:
5. Backwash rate:
6. Backwash pumps (number and capacity)
7. Method of rate control:
8. Source and capacity of backwash tank:
9. Holding capacity of dirty water tank:
10. Method of Cleaning:
11. Disposal of Backwash Solids:

F. Disinfection

1. Type of Disinfectant Used:
2. Type of feeder
3. Capacity:
4. Disinfectant Dosage:
5. Contact Time:
6. Point of Application:
7. Automatic Switchover:
8. Ventilation Provided:
9. Safety equipment:

10. Testing Equipment:

11. Housing:

G. Iron and Manganese Control

1. Type of System:

H. Softening:

1. Type:

2. Aeration:

3. Chemical Feed Point:

4. Sludge removal and disposal method:

5. Number and size of brine and salt storage tank:

6. Brine Waste Disposal:

7. Housing:

I. Aeration

1. Type:

2. Loading Rate:

V. Water Storage

A. Tank:

1. Type:

2. Number:

3. Capacity:
4. High Water Level:
5. Elevation at Bottom of Tank:
6. Available Pressure:
7. Booster Pump:

VI. Distribution System

A. Water Lines

1. Type of Pipe Material:
2. Diameter and Lengths:
3. Number of Hydrants:
4. Number and size of valves:
5. Stream, Highway, and Railroad Crossings:
6. Replacement of Existing New Lines:
7. Water Main Separation from Sewers:
8. Water Main vertical distance:

B. Fire Protection:

VII. Miscellaneous

- A. Laboratory Equipment:
- B. Safety Equipment:
- C. Fence Location and Type:

- D. Handrail for the tanks:
- E. Relationship to Flood Elevation:
- F. Provisions to maintain water supply during construction:
- G. Standby Power Equipment:
- H. Site inspection:
- I. Statement in the specifications as to the protection against any adverse environmental effect (e.g. dust, noise, soil erosion) during construction:
- J. Hoists for removing heavy equipment:
- K. Adequate sampling facilities:
- L. Structural Work Proposed on Building:

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